JOSH GREEN, M.D.
GOVERNOR
KE KIA'ĀINA

KEITH A. REGAN
COMPTROLLER
KA LUNA HO'OMALULUHANA LAULĀ

CHRISTINE M. SAKUDA
CHIEF INFORMATION OFFICER
LUNA 'ENEHANA

DEPT. COMM. NO. 404

STATE OF HAWAIʻI | *KA MOKUʻĀINA O HAWAIʻI*
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES | *KA ʻOIHANA LOIHELU A LAWELAWE LAULĀ*

OFFICE OF ENTERPRISE TECHNOLOGY SERVICES | *KEʻENA HOʻOLANA ʻENEHANA*

P.O. BOX 119, HONOLULU, HAWAII 96810-0119

June 17, 2026

The Honorable Ronald D. Kouchi
President of the Senate
and Members of the Senate
Thirty-Third State Legislature
State Capitol, Room 409
Honolulu, Hawaiʻi 96813

The Honorable Nadine K. Nakamura
Speaker and Members of the
House of Representatives
Thirty-Third State Legislature
State Capitol, Room 431
Honolulu, Hawaiʻi 96813

Aloha Senate President Kouchi, House Speaker Nakamura, and Members of the Legislature:

Pursuant to HRS section 27-43.6, which requires the Chief Information Officer to submit applicable independent verification and validation (IV&V) reports to the Legislature within ten days of receiving the report, please find attached the report the Office of Enterprise Technology Services received for the State of Hawaiʻi, Department of Human Services, Systems Modernization Project.

In accordance with HRS section 93-16, this report may be viewed electronically at http://ets.hawaii.gov (see "Reports").

Sincerely,

Christine M. Sakuda
Chief Information Officer
State of Hawaiʻi

Attachments (2)

Hawaii Department of Human Services Systems Modernization Project

Final IV&V Status Report
for Reporting Period February 1 – 28, 2026

Submitted: March 17, 2026

PUBLIC CONSULTING GROUP

Solutions that Matter

Overview

- Executive Summary
- IV&V Findings and Recommendations
- IV&V Engagement Status
- Appendices
  - A – IV&V Criticality Ratings
  - B – Risk Identification Report
  - C – Acronyms and Glossary
  - D – Background Information

PUBLIC CONSULTING GROUP
Solutions that Matter

Executive Summary

Executive Summary – 1

The next significant milestone for the BES project is the go/no go decision on March 2, 2026, to begin System Integration Testing for the 5 Change Requests (CRs). The development was completed for four of the five CRs, with the final CR scheduled for completion on March 3, 2026. The project team continued working on readiness activities for the BES Pilot implementation, including testing outstanding defects identified during the previous SIT cycle, finalizing the revised Maintenance & Operations (M&O) schedule, and defining the required work for Organizational Change Management (OCM).

The primary risks for the BES project are related to:

Preparing for the Pilot/OCM: Defining a clear and actionable plan for Organizational Change Management (OCM), and Pilot Readiness. IV&V realizes DHS/ASI spent a significant amount of time on OCM this month and anticipates reviewing the overall plan, activities, and schedule when they are made available. DHS and the ASI decided to shift some OCM activities to the Project Readiness team, as many overlap among OCM, Training, and Readiness – all in support of the BES Pilot.

Requirements: Finalizing the mapping of contract requirements to the delivered solution. The interim Requirements Traceability Matrix (RTM) provided to DHS this month does not meet DHS expectations for validating that the BES solution will meet contractual requirements and will be thoroughly tested before UAT starts. The ASI is updating the RTM based on the team's feedback.

Testing: Testing the BES solution, proving the BES system is stable, allowing DHS to focus on testing the functionality during User Acceptance Testing without revealing a high level of functional defect as occurred in the previous UAT phase.

System Integrity Review Tool (SIRT): This tool is a contract deliverable and FNS requirement used to evaluate if the BES system and solution meet the SNAP requirements. The submission to FNS was planned for January 21, 2026, but has been delayed. It is not known yet if this will have a material impact to the BES Project.

The project is transitioning away from developing the BES solution to testing and readiness for UAT and Pilot Implementation. Building confidence in the BES solution among both DHS and FNS is critical for a successful BES Pilot and statewide implementation.

Dec	Jan	Feb	Category	IV&V Observations
L	L	L	System Design	Design work for the five open CRs was completed in the reporting period. The BES infrastructure expansion continued through planned application rollouts and proof-of-concept evaluations for potential architectural additions or replacements.

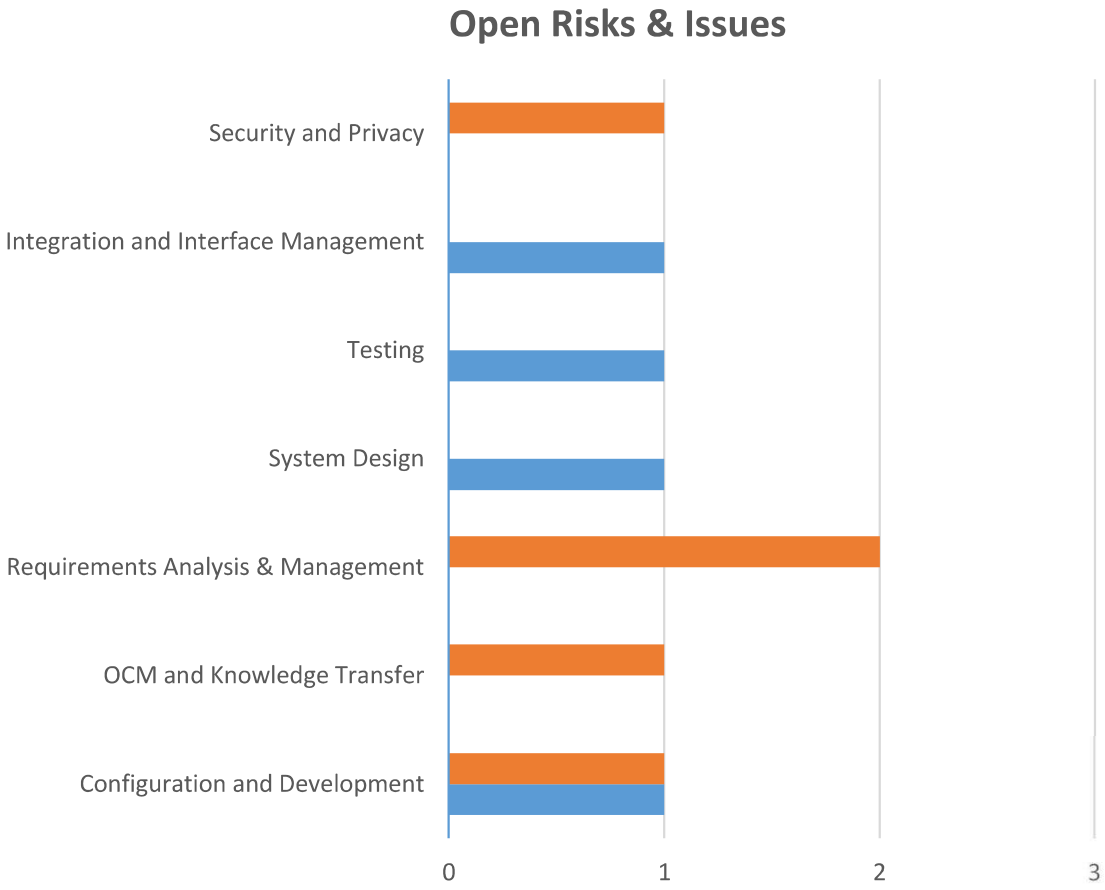
Executive Summary – 2

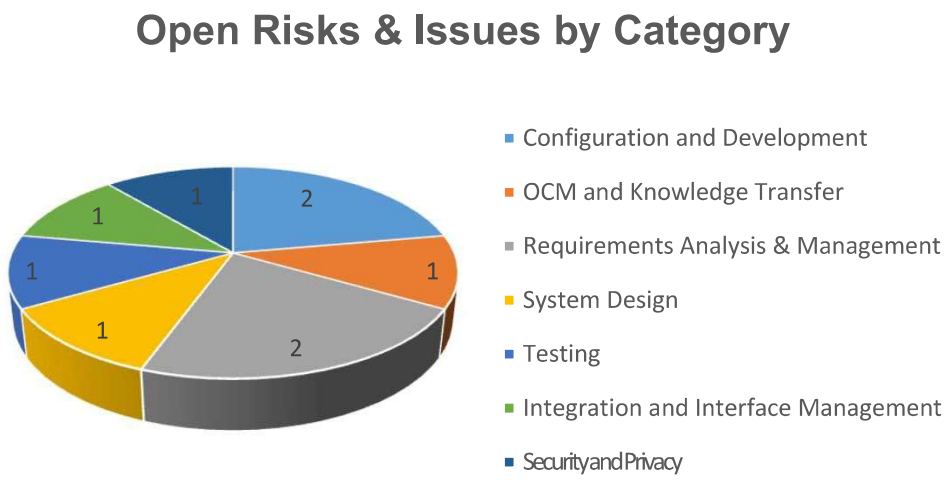
Dec	Jan	Feb	Category	IV&V Observations
M	M	M	Configuration and Development	Development and integration testing for 4 of the 5 remaining CRs was completed in the reporting period, with the remaining CR planned to complete on March 3rd. Completion of the Configuration Management plan is scheduled for completion in April 2026.
L	L	L	Integration and Interface Management	Physical interface testing is on schedule to be completed prior to the next SIT cycle on March 3, 2026, including remediation of all related defects.
M	L	L	Testing	The ASI testing team focused on completing work required to meet the SIT entry criteria, with a go/no meeting scheduled for March 2, 2026. Additionally, the ASI and DHS continued to collaborate on remediating data conversion defects.
M	M	M	Security and Privacy	The ASI and DHS security teams continue to remediate open findings from vulnerability and configuration security scans. Additionally, work continues to prepare for UAT, planned to begin on April 20, 2026.
M	M	M	Requirements Analysis & Management	DHS and the ASI met with FNS, resulting in changes identified to the SIRT prior to submission to FNS. DHS raised concerns regarding the interim RTM that need to be addressed prior to approving the final version of the RTM, which is needed to validate the BES solution meets contractual requirements.
N/A	M	M	OCM and Knowledge Transfer	IV&V observed an increased focus by the project to define work needed to prepare DHS for the BES Pilot Implementation. Having these Implementation steps, including timing and roles and responsibilities for the work, is needed and currently in progress.

IV&V Findings and Recommendations

IV&V Findings and Recommendations – chart 1

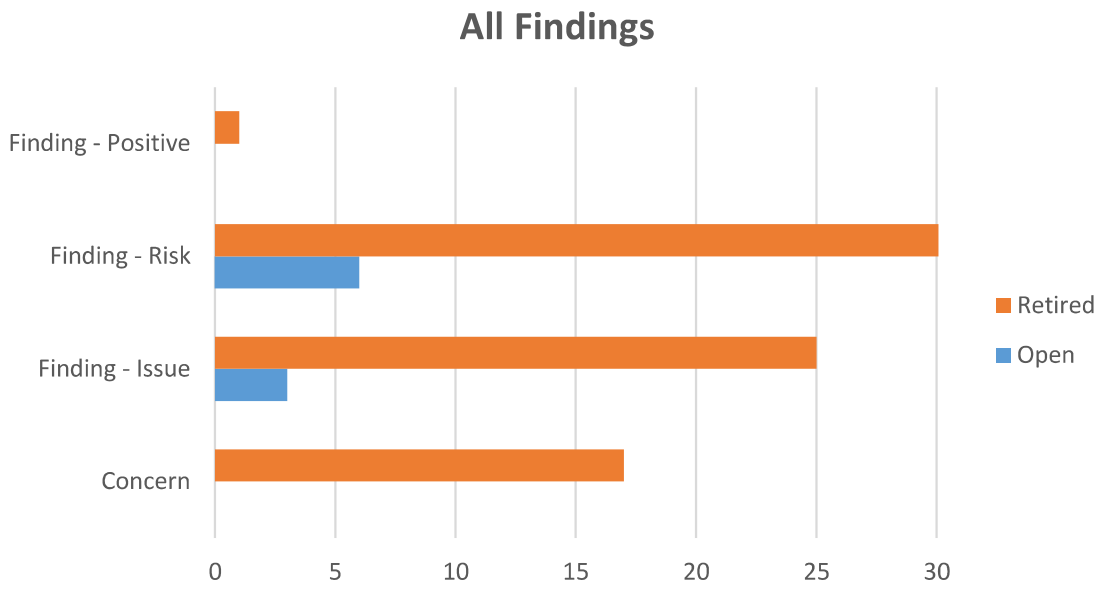
As of the February 2026 reporting period, PCG is tracking 9 open findings (6 risks, 3 issues) and has retired 86 findings. Of the 9 open findings, 5 are Medium, and 4 are Low.





IV&V Findings and Recommendations – chart 2

The following figure provides a breakdown of the 95 IV&V findings (positive, risks, issues, concerns) by status (open, retired).



IV&V Findings and Recommendations – 3

Findings Opened During the Reporting Period

#	Finding	Category
	None	

IV&V Findings and Recommendations – 4

Findings Retired During the Reporting Period

#	Finding	Category
	None	

IV&V Findings and Recommendations – 5

Preliminary Concerns Investigated During the Reporting Period

#	Finding	Category
	None	

IV&V Findings and Recommendations – 6

System Design

#	Key Findings	Criticality Rating
73	**Risk – The planned BES infrastructure is complex, which could be difficult to implement and maintain, and could lead to schedule/cost impacts.** The Bindplane software rollout has been restarted, with the previously reported issues resolved. The ASI continues to make software updates to the BES infrastructure to simplify the overall solution and reduce costs. Demos are occurring for Wiz.io for possible use in the BES infrastructure.	

Recommendations	Progress
• ASI develop a process to closely monitor cloud and other product changes (software updates/new releases), manage changes, and regression test once updates are applied.	In Process
• The project team work to establish strong governance over the utilization and maintenance of various tools/components.	In Process
• ASI allot time in the schedule to conduct proof of concepts to assure infrastructure components work as expected.	In Process
• ASI maintain a detailed schedule for infrastructure tasks to avoid unexpected delays that could delay project milestones and the critical path.	In Process

IV&V Findings and Recommendations – 7

Configuration and Development

#	Key Findings	Criticality Rating
70	**Risk – Insufficient configuration management could lead to development confusion and reduce the effectiveness of defect resolution.** The ASI confirmed that the configuration management plan will be included in the overall Infrastructure Management Plan, which is currently scheduled to be available for review on 4/13/2026.	L

Recommendations	Progress
• ASI adhere to plans for configuration management as documented in BI-6 DDI Plan, Section 5.2 and clarify details and/or any changes with DHS.	In Process
• ASI validate plans for configuration management with DHS and agree on a meaningful set of configuration items or settings they will track.	In Process

IV&V Findings and Recommendations – 8

Configuration and Development

#	Key Findings	Criticality Rating
80	**Issue – Development delays have negatively impacted the project schedule and delayed go-live.** The ASI reported in February that development for CR2004-009 will not be completed by February 27, 2026, as planned, but will be extended to March 3, 2026. Since the SIT Go/No-Go meeting is scheduled for March 2, 2026, the ASI will seek conditional approval from DHS to proceed. The delay is minor and is attributed to the ASI not having access to a Virtual Server managed by DHS.	M

Recommendations	Progress
• The ASI closely monitor progress on development efforts and create a mitigation strategy to avoid delays	In Process
• ASI provides DHS software demonstrations (demos) of new BES functionality as part of the DDI process.	In Process

IV&V Findings and Recommendations – 9

Integration and Interface Management

#	Key Findings	Criticality Rating
93	**Risk – Due to the lack of physical and technical (Transport Layer) testing of the interfaces and data transfer failure, conditions may exist with data format, boundaries, and dependencies. These failures may result in intermittent and hard-to-isolate problems or errors.** With 95% of technical interface testing completed (183 of 191), no additional tests were reported as Passed during the current reporting period. The ASI is addressing issues associated with failed tests and plans to rerun the affected tests once remediation is complete. The ASI has not indicated any concerns about completing the remaining tests by the System Integration Testing (SIT) cycle end date of April 3, 2026. IV&V will continue to monitor test execution through completion, including any retesting following defect remediation.	L

Recommendations	Progress
• API interfaces should be tested for failure conditions during connection and transfer operations.	In Process
• FTP and file interfaces should be tested for data and file integrity.	In Process
• Test data fields for system impacts resulting from data that is poorly formatted, out of range, or other unexpected data transmission errors.	In Process

IV&V Findings and Recommendations – 10

Testing

#	Key Findings	Criticality Rating
83	**Issue – Gaps in test coverage and slower-than-expected progress in testing may result in schedule delays if subsequent test phases uncover a higher volume of defects and user feedback than initially anticipated.** With the SIT Go/No Go milestone for the five (5) Change Requests (CRs) approaching on 3/2/26, ongoing functional SIT testing continues to identify defects concentrated in the Eligibility area, along with reintroduced defects persisting in the Batch Framework and SSP areas. To mitigate recurrence, the ASI reports that it's continuing to improve code quality and testing controls through review checkpoints, daily build checks, and tighter merge validations. IV&V will continue to monitor these measures for evidence of their effectiveness as testing progresses. The ASI plans to expand the automated regression test suite next month by adding additional automated test cases. IV&V will continue to monitor coverage growth as gaps in automation coverage could limit functional validation and impact UAT readiness.	L

Recommendations	Progress
• ASI to continue to strengthen regression testing by retesting CR-impacted modules and previously resolved defects to reduce the risk of reintroduced issues.	In Progress
• ASI to assess whether strengthened merge discipline and enhanced code reviews are associated with a measurable reduction in reintroduced defects over this SIT cycle.	In Progress
• DHS to review the subset of functional SIT test cases currently being executed to confirm that coverage is sufficient to mitigate the risk of defects escaping into UAT.	New

IV&V Findings and Recommendations – 11

Security and Privacy

#	Key Findings	Criticality Rating
106	**Risk – Critical and high vulnerability and configuration scan findings are not remediated within the documented timeframes, potentially impacting the project schedule and causing delays.** As of February 28th, 2026, BES had 32 critical findings in an open or in-progress state outside the 15-day remediation timeframe, and 6 critical findings were within the timeframe. BES had 121 high-rated findings in an open state outside the 30-day remediation timeframe, and 9 high-rated findings were within the timeframe. In addition to the critical and high POAM findings listed above, 10 critical and 31 high findings from 2024 and 1 high finding from December 2025 remain deferred and are part of Oracle Cloud Infrastructure, which Oracle is responsible for patching quarterly.	M

Recommendations	Progress
• IV&V recommends that the Security Team enhance its Vulnerability Assessment and Prioritization Program to strengthen the agency's ability to manage cyber risk. A key component of this program is the reclassification of vendor-provided vulnerability ratings based on the agency's mission, operational environment, and the criticality of each affected system. This ensures that remediation priorities reflect the agency's unique risk exposure rather than generic severity scores.	New

IV&V Findings and Recommendations – 12

Requirements Analysis & Management

#	Key Findings	Criticality Rating
94	**Risk - The lack of an effective way to validate BES requirements could lead to project delays and unfulfilled user needs if DHS later identifies unmet contractual requirements.** In February, DHS reviewed the interim Requirements Traceability Matrix (delivered in January); however, the interim RTM remains incomplete and is not ready for DHS to use for validating requirements coverage. Several requirement mappings continue to require clarification or correction, and additional updates were requested. Non-functional requirement traceability also remains outstanding. Finalizing a fully updated RTM will be necessary for DHS to confirm that all contractual requirements are accurately represented before upcoming test activities, as any gaps may lead to rework or schedule impacts.	M

Recommendations	Progress
• Develop a document that provides DHS with a feasible and effective way to map contract requirements to passed test cases, and, per the BI-19 (Complete and Final Test Plan),"Maps the implementation, functional and technical requirements to the test cases and test scripts".	In Process
• Ensure test scripts thoroughly and comprehensively test the system to assure each requirement is met.	In Process
• Develop a deliverable that provides an audit trail for changes to the requirements from the contract such as obsoleted requirements, when that decision was made, and the change requests.	In Process
• Weekly reporting on clean-up efforts in JIRA regarding incorrect statuses of epics, use case, and requirements.	In Process

IV&V Findings and Recommendations – 13

Requirements Analysis & Management

#	Finding	Category
108	**Issue - Unplanned federally mandated system requirements could lead to project delays and increase the project budget.** No new Federal requirements were introduced in the reporting period, but discussions during a call between DHS and FNS did indicate some potential risk in this area. The BES Implementation will carry over into Federal Fiscal Year (FFY) 2027. FNS stated they are not yet approving any federal funds for FFY 2027, which begins October 1, 2026. This is not to say they won't, but at this time they cannot commit to it. DHS and FNS do have monthly meetings where this can be discussed and clarified for any possible impact to the project.	L

Recommendations	Progress
• Pursue all communication channels that could provide early, and validated, information on possible requirements being sent out to the States.	In Process

IV&V Findings and Recommendations – 14

OCM and Knowledge Transfer

#	Finding	Category
111	**Risk –Insufficient Organizational Change Management (OCM) Planning and Execution Increases Risk to BES User Adoption and Deployment Success** DHS and the ASI conducted several meetings to review, adjust and agree upon the remaining OCM activities. IV&V has seen some of this work in progress with many aligned to the below recommendations. The project team is defining what work is being planned by OCM vs. the Pilot Readiness team and actions, noting that identifying the strategies and actions that will bring the most value to the Pilot and project teams is most valuable vs. the alignment to the titles of OCM and Pilot Readiness.	M

Recommendations	Progress
• Develop and maintain a detailed OCM activity schedule that is integrated with the overall BES master schedule, including testing, training, pilot, and go live phases	New
• Define and document DHS and ASI OCM roles, responsibilities, decision authority, and handoffs to support effective execution and accountability.	New
• Identify key OCM artifacts (e.g., change impact assessments, communications plans, stakeholder engagement plans, readiness assessments, adoption metrics) and ensure they are produced, reviewed, and actively used to guide decision-making.	New
• Establish measurable OCM performance indicators and provide regular status reporting to DHS leadership to support early identification of readiness gaps and corrective action.	New

IV&V Status

IV&V Engagement Status

IV&V Engagement Status				
IV&V Engagement Area	**Dec**	**Jan**	**Feb**	**Comments**
IV&V Budget				
IV&V Schedule				
IV&V Deliverables				PCG submitted the final January IV&V Monthly Status Report.
IV&V Staffing				
IV&V Scope				

Engagement Status Legend		
 The engagement area is within acceptable parameters.	 The engagement area is somewhat outside acceptable parameters.	 The engagement area poses a significant risk to the IV&V project quality and requires immediate attention.

IV&V Activities

- IV&V activities in the February reporting period:
  - Completed – January Monthly Status Report
  - Ongoing – Review the BES Project Artifacts and Deliverables
  - Ongoing – Attend BES Project meetings (see Additional Inputs pages for details)
  - Ongoing – Review available ASI contracts and contract amendment documentation
- Planned IV&V activities for the March reporting period:
  - Ongoing – Observe BES Design and Development sessions as scheduled
  - Ongoing – Observe Bi-Weekly Project Status meetings
  - Ongoing – Observe Weekly Architecture meetings
  - Ongoing – Observe Weekly Security meetings
  - Ongoing – Monthly IV&V findings meetings with the ASI
  - Ongoing – Monthly IV&V Draft Report Review with DHS, ETS, and ASI
  - Ongoing – Participate in Bi-Weekly DHS and IV&V Touch Base meetings
  - Ongoing – Review BES artifacts and deliverables

Deliverables Reviewed

Deliverable Name	Deliverable Date	Version
BI-05 Project Schedule	02/04/2026, 02/12/2026, 02/19/2026, 02/26/2026	N/A
BI-02 Project Status Report	02/04/2026, 02/12/2026, 02/19/2026, 02/26/2026	N/A
BI-20 Test Scenarios, Cases, and Scripts	2/20/2026	N/A

Additional Inputs – Artifacts

Artifact Name	Artifact Date	Version
FNS Handbook 901	01/2020	V2.4
NIST Special Publication 800-53 Security and Privacy Controls for Information Systems and Organizations	12/20/2020	Rev.5
R0.13 SIT Defect Dashboard	N/A	N/A
Interface Dashboard – Confluence page	N/A	N/A
Jira Requirements Details	N/A	N/A
Jira Testing Lists	N/A	N/A
BES R0.13 System Testing Results - CRs and Pending Epics	N/A	N/A
BES R0.13 System Testing Results - Core	N/A	N/A
Batch Defect Dashboard	N/A	N/A
Reporting Defect Dashboard	N/A	N/A

Additional Inputs

Meetings and/or Sessions Attended/Observed:

1. IV&V Team Meeting – 2/2/2026, 2/9/2026, 2/11/2026, 2/17/2026, 2/23/2026, 2/26/2026
2. IV&V/ASI January Pre-draft Review – 2/5/2026
3. HI DHS BES January Draft IV&V Report Review – 2/13/2026
4. BI-Weekly DHS BES PMO/IV&V Check-in – 2/12/2026, 2/26/2026
5. Bi-Weekly DHS and IV&V Touch Base – 2/3/2026, 2/17/2026
6. Weekly BES Infrastructure meeting – 2/6/2026, 2/13/2026, 2/20/2026, 2/27/2026
7. Weekly Client BES 2023 Project Status Meeting – 2/4/2026, 2/11/2026, 2/18/2026, 2/25/2026
8. Security Touchpoint – 2/4/2026, 2/11/2026, 2/18/2026, 2/25/2026
9. (External) Bi-weekly BES CCB Meeting – 2/4/2026, 2/18/2026
10. (External) C!A Current Monthly Checkpoint – 2/3/2026
11. (External) BES M&O Working Group – 2/4/2026
12. (External) BES Readiness/BI-29 Updates – 2/23/2026
13. eWorld/IV&V Mid-Month Check-in – 2/19/2026
14. (External) BES: FNS Connect – 2/5/2026
15. (External) BES: OCM and Communications – 2/23/2026
16. (External) BES Data Conversion Validation #2 Kickoff Meeting – 2/2/2026
17. (External) BES Data Conversion - Defect Triage – 2/4/2026, 2/11/2026, 2/18/2024, 2/25/2026
18. FNS-HI SIRT Discussion – 2/17/2026
19. (External) BES: Change Champions Touchpoint – 2/27/2026
20. (External) BES BI-22a SIRT Deliverable Review Meeting – 2/13/2026, 2/20/2026

Appendices

Appendix A – IV&V Criticality Ratings

Criticality Rating	Definition
H	A high rating is assigned if there is a possibility of substantial impact to product quality, scope, cost, or schedule. A major disruption is likely, and the consequences would be unacceptable. A different approach is required. Mitigation strategies should be evaluated and acted upon immediately.
M	A medium rating is assigned if there is a possibility of moderate impact to product quality, scope, cost, or schedule. Some disruption is likely, and a different approach may be required. Mitigation strategies should be evaluated and implemented as soon as feasible.
L	A low rating is assigned if there is a possibility of a slight impact on product quality, scope, cost, or schedule. Minimal disruption is likely, and some oversight is most likely needed to ensure that the risk remains low. Mitigation strategies should be considered for implementation when possible.

Appendix B – Findings Log

- The complete Findings Log for the BES Project is provided in a separate file.

Appendix C – Acronyms and Glossary – 1

Acronym	Definition
APD	Advance Planning Document
ASI	Application System Integrator
BES	Benefits Eligibility Solution
CCWIS	Comprehensive Child Welfare Information System
CM	Configuration Management
CMMI	Capability Maturity Model Integration
CMS	Center for Medicare and Medicaid Services
CR	Change Request
DDI	Design, Development and Implementation
DED	Deliverable Expectation Document
DHS	Hawaii Department of Human Services
DLV	Deliverable
E&E	Eligibility and Enrollment
EA	Enterprise Architecture
ECM	Enterprise Content Management (FileNet and DataCap)
ESI	Enterprise System Integrator (Platform Vendor)
ETS	State of Hawaii Office of Enterprise Technology Services
FIPS	Federal Information Processing Standard
HIPAA	Health Information Portability and Accountability Act of 1996
IDM	Identity and Access Management (from KOLEA to State Hub)
IEEE	Institute of Electrical and Electronics Engineers
IES	Integrated Eligibility Solution
ITIL	Information Technology Infrastructure Library

Appendix C – Acronyms and Glossary – 2

Acronym	Definition
IV&V	Independent Verification and Validation
KOLEA	Kauhale On-Line Eligibility Assistance
M&O	Maintenance & Operations
MEELC	Medicaid Eligibility and Enrollment Life Cycle
MEET	Medicaid Eligibility and Enrollment Toolkit
MOU	Memorandum of Understanding
MQD	Hawaii Department of Human Services MedQuest Division
NIST	National Institute of Standards and Technology
OE	Operating Environment
OIT	Department of Human Services Office of Information Technology
PIP	Performance/Process Improvement Plan
PMBOK®	Project Management Body of Knowledge
PMI	Project Management Institute
PMO	Project/Program Management Office
PMP	Project Management Plan
QA	Quality Assurance
QM	Quality Management
RFP	Request for Proposal
ROM	Rough Order of Magnitude
RMP	Requirements Management Plan
RTM	Requirements Traceability Matrix
SEI	Software Engineering Institute
SLA	Service-Level Agreement
SME	Subject Matter Expert

Appendix C – Acronyms and Glossary – 3

Acronym	Definition
SOA	Service Oriented Architecture
SOW	Statement of Work, Scope of Work
VVP	Software Verification and Validation Plan
XLC	Expedited Life Cycle

Appendix D – Background Information

Systems Modernization Project

The DHS Enterprise Program Roadmap includes contracting with three separate vendors with the following high-level scope:

- ESI or Platform Vendor – responsible for the shared technology and services required for multiple Application vendors to implement and support functionality that leverages the DHS Enterprise Platform.
- ASI or ASI Vendor – responsible for the DDI of the Benefits Eligibility Solution (BES Project) enhancing the currently implemented Medicaid E&E Solution (KOLEA) and providing support for the combined Solutions.
- CCWIS Vendor – responsible for the DDI of the CCWIS Solution to meet the needs of child welfare services and adult protective services (CCWIS Project) and providing support for the Solution.

Systems Modernization IV&V Project

IV&V performs objective assessments of the design, development/configuration and implementation (DDI) of DHS' System Modernization Projects. DHS has identified three high-risk areas where IV&V services are required:

- Transition of M&O from DHS' incumbent vendor to the ESI and ASI vendors
- BES DDI
- CCWIS DDI

On the BES DDI Project, IV&V is responsible for:

- Evaluating efforts performed by the Project (processes, methods, activities) for consistency with federal requirements and industry best practices and standards
- Reviewing or validating the work effort performed and deliverables produced by the ASI vendor as well as that of DHS to ensure alignment with project requirements
- Anticipating project risks, monitoring project issues and risks, and recommending potential risk mitigation strategies and issue resolutions throughout the Project's life cycle
- Developing and providing independent project oversight reports to DHS, ASI vendors, State of Hawaii Office of Enterprise Technology Services (ETS) and DHS' Federal partners

Appendix D – Background Information – 1

What is Independent Verification and Validation (IV&V)?

- Oversight by an independent third party that assesses the Project against industry standards to provide an unbiased view to stakeholders
- The goal of IV&V is to help the State get the solution they want based on requirements and have it built according to best practices
- IV&V helps improve design visibility and traceability and identifies (potential) problems early
- IV&V objectively identifies risks and communicates to project leadership for risk management

PCG's Eclipse IV&V® Technical Assessment Methodology

- Consists of a 4-part process made up of the following areas:
  1. **Discovery** – Discovery consists of reviewing documentation, work products and deliverables, interviewing project team members, and determining applicable standards, best practices and tools.
  2. **Research and Analysis** – Research and analysis is conducted in order to form an objective opinion.
  3. **Clarification** – Clarification from project team members is sought to ensure agreement and concurrence of facts between the State, the Vendor, and PCG.
  4. **Delivery of Findings** – Findings, observations, and risk assessments are documented in this monthly report and the accompanying Findings and Recommendations log. These documents are then shared with project leadership on both the State and Vendor side for them to consider and take appropriate action on.

IV&V Assessment Categories for the BES Project

- Project Management
- Requirements Analysis & Management
- System Design
- Configuration and Development
- Integration and Interface Management
- Data Management and Conversion
- Security and Privacy
- Testing
- OCM and Knowledge Transfer
- Pilot Test Deployment
- Deployment



Solutions that Matter

ID	Title	Reporter	Finding Type	Identified Date	Category	Observation	Significance	Recommendation	Event Horizon	Impact	Probability	Analyst Priority	Finding Status	Status Update	Client Comments	Vendor Comments
111	Insufficient Organizational Change Management (OCM) Planning and Execution Increases Risk to BES User Adoption and Deployment Success	Molina, Brad	Finding - Risk	2/1/2026	OCM and Knowledge Transfer	Observation: DHS and IV&V have observed that the ASI has not demonstrated sufficient progress in fully defining, planning, and implementing Organizational Change Management (OCM) for the BES Project. While OCM has been acknowledged as a critical success factor and discussions regarding strategy and approach have occurred, key foundational OCM artifacts and execution mechanisms remain incomplete or not yet available for DHS and IV&V review. Specifically, IV&V notes that: • A finalized and DHS-approved OCM strategy and implementation plan has not been fully established or baselined. • A detailed OCM activity schedule, aligned to BES testing, pilot, and go live milestones, has not been consistently available. • Roles, responsibilities, and ownership between DHS and the ASI for OCM execution lack sufficient clarity to support effective planning and resourcing. • Key OCM deliverables (e.g., communications plans, stakeholder readiness assessments, change impact analyses, and user adoption metrics) have not been fully defined or demonstrated in execution. As a result, DHS and IV&V have limited visibility into how change readiness, user adoption, and organizational preparedness will be systematically achieved in advance of BES pilot and statewide deployment.	OCM is a critical component of large-scale system modernization efforts such as BES, particularly given the breadth of business process change, the number of impacted stakeholders, and the dependency on end-user adoption for operational success. Without a clearly defined and actively executed OCM framework, the project risks focusing primarily on technical readiness while underestimating the people, process, and behavioral changes required for successful implementation. The absence of a mature and executable OCM approach limits DHS's ability to: • Proactively prepare stakeholders and end users for new processes and system behaviors. • Identify and mitigate resistance to change. • Measure organizational readiness prior to key deployment milestones. • Ensure consistent and coordinated messaging between training, communications, and operational leadership.	- Ensure a comprehensive OCM strategy and implementation plan is finalized, approved by DHS, and baselined. - Develop and maintain a detailed OCM activity schedule that is integrated with the overall BES master schedule, including testing, training, pilot, and go live phases - Clearly define and document DHS and ASI OCM roles, responsibilities, decision authority, and handoffs to support effective execution and accountability. - Identify key OCM artifacts (e.g., change impact assessments, communications plans, stakeholder engagement plans, readiness assessments, adoption metrics) and ensure they are produced, reviewed, and actively used to guide decision-making. - Establish measurable OCM performance indicators and provide regular status reporting to DHS leadership to support early identification of readiness gaps and corrective action.	now	4	2	Med	Open	2/28/2026 - DHS and the ASI conducted several meetings to review, adjust and agree upon the remaining OCM activities. IVV has seen some of this work in progress with many aligned to the below recommendations. The project team is defining what work is being planned by OCM vs. the Pilot Readiness team and actions, noting that identifying the strategies and actions that will bring the most value to the Pilot and project teams is most valuable vs. the alignment to the titles of OCM and Pilot Readiness.		
108	Unplanned federally mandated system requirements could lead to project delays and increase the project budget.	Molina, Brad	Finding - Issue	9/5/2025	Requirements Analysis & Management	As part of the OBBBA, there are several new SNAP requirements of which some are awaiting FNS implementation guidance. Examples include: new conditions for work requirements, prior ABAWD waivers, new exemption classes, and standard utility deductions. The project is currently in the Systems Integration Test (SIT) phase, and the new requirements have yet to be fully defined, developed, and tested.	In 2024, DHS and the ASI agreed to transition from an "Agile" to a "Waterfall" software development life cycle to reduce the risk of future schedule delays. The Waterfall approach requires all requirements to move through the development as a single set of program code, processes, and procedures, ensuring that functionality is tested holistically. Once testing is complete, DHS can be confident that the base system is stable, performs as intended, and that functional interactions operate correctly. As the BES system is currently in the testing phase, introducing new requirements at this stage could create several challenges for the BES Pilot Release: Rework – Functionality previously tested may need to be retested as new code is introduced. Training materials, content, and operational processes may also require updates to reflect the changes; Schedule Delays – If new requirements are added, the project team may defer testing of existing functionality until the new functionality is developed and ready, potentially delaying the Pilot and Statewide Implementation start dates; Resources – Additional effort may be required to define, develop, and test new requirements. This could necessitate more ASI and DHS staff support, as well as technical adjustments (e.g., keeping development environments active longer than originally planned).	Open - Pursue all communication channels that could provide early, and validated, information on possible requirements being sent out to the States. Closed - Build in contingency in schedule to account for possible new requirements being introduced that must be part of the initial implementation of BES.	now	3	2	Med	Open	2/28/2026 -No new Federal requirements were introduced in the reporting period, but discussions during a call between DHS and FNS did indicate some potential risk in this area. The BES Implementation will carry over into Federal Fiscal Year (FFY) 2027. FNS stated they are not yet approving any federal funds for FFY 2027, which begins October 1, 2026. This is not to say they won't, but at this time they cannot commit to it. DHS and FNS do have monthly meetings where this can be discussed and clarified for any possible impact to the project. 12/31/2025 - The State of Hawaii is part of a lawsuit, along with 20 other states and the District of Columbia, challenging USDA guidance implementing HR 1 requirements, including timing to implement these changes. One action the ASI is taking to mitigate this risk includes contingency in the revised DDI schedule to account for possible new requirements being introduced that must be in place prior to implementation of BES solution. Any revisions to overall timing of DDI schedule may also require updates to impacted tasks in the M&O schedule. 11/30/2025 - The Food and Nutrition Services (FNS) organization is back to working with the government shutdown ending and clarification on the SNAP requirement changes continues to be an issue. Without clear guidance from FNS for the requirements needed to finalize the Change Requests (CRs) there may be additional schedule delays and increased project costs. 10/30/2025 - The Food and Nutrition Services (FNS) organization is now unable to provide some interpretations on the required policy mandates due to the government shutdown, but DHS/ASI are continuing to move forward with those changes that are fully defined. 09/30/2025 - As of the end of the reporting period, DHS was still awaiting clarifications from the Food and Nutrition Service (FNS) on required changes needed to meet Federal Eligibility mandates.		
106	Critical and high vulnerability and configuration scan findings are not remediated within the documented timeframes.	Heath, Dustin	Finding - Risk	2/28/2025	Security and Privacy	The BES system does not currently remediate critical vulnerabilities and compliance issues within 15 days, and high vulnerabilities are not remediated within 30 days as required by the BES Vulnerability Management Procedures document.	The BES system faces elevated cybersecurity, operational, financial, and compliance risks if vulnerabilities are not remediated within the required timeframe. Prompt corrective actions are necessary to ensure timely vulnerability resolution and safeguard the BES system environment prior to going live. Un-remediated critical and high Nessus compliance scans can significantly hinder system development efforts by introducing security risks, compliance failures, and operational roadblocks. This lack of remediation of system configuration findings increases technical debt, disrupts development workflows, and diverts resources from core project objectives.	NEW IV&V recommends that the Security Team enhance its Vulnerability Assessment and Prioritization Program to strengthen the agency's ability to manage cyber risk. A key component of this program is the reclassification of vendor-provided vulnerability ratings based on the agency's mission, operational environment, and the criticality of each affected system. This ensures that remediation priorities reflect the agency's unique risk exposure rather than generic severity scores. COMPLETE Update the BES Vulnerability Management Procedures document with the Jira ticketing process and workflow from vulnerability and configuration scan remediation with who owns each step. Rate Configuration scan result failures and how they impact the security of the BES system (Critical, High, Medium, and Low) instead of simple pass/failure results. In January 2025, 82 critical and High-finding POAMs were listed due to the Tenable configuration scan results. The POAMs for configuration scans are now listed as "failed"; due to the binary nature of the scan engine and does not rate the criticality of the system configuration on the business operation of how the hosts are used. Implement an escalation process to involve senior leadership if deadlines are missed.	30 days prior to the IRS assessment or the next third-party assessment.	3	3	Med	Open	2/28/2026– As of February 28th, 2026, BES had 32 critical findings in an open or in-progress state outside the 15-day remediation timeframe, and 6 critical findings were within the timeframe. BES had 121 high-rated findings in an open state outside the 30-day remediation timeframe, and 9 high-rated findings were within the timeframe. In addition to the critical and high POAM findings listed above, 10 critical and 31 high findings from 2024 and 1 high finding from December 2025 remain deferred and are part of Oracle Cloud Infrastructure, which Oracle is responsible for patching quarterly. 1/31/2026– As of January 31st, 2026, BES had 27 critical findings in an open or in-progress state outside the 15-day remediation timeframe, and 3 critical findings were within the timeframe. BES had 110 high-rated findings in an open state outside the 30-day remediation timeframe, and 26 high-rated findings were within the timeframe. In addition to the critical and high POAM findings listed above, 10 critical and 31 high findings from 2024 remain deferred and are part of Oracle Cloud Infrastructure, which Oracle is responsible for patching quarterly. 12/31/2025– As of December 31st, 2025, BES had 22 critical findings in an open or in-progress state outside the 15-day remediation timeframe, and 7 critical findings were within the timeframe. BES had 98 high-rated findings in an open state outside the 30-day remediation timeframe, and 36 high-rated findings were within the timeframe. In addition to the critical and high POAM findings listed above, 14 critical and 33 high findings from 2024 remain deferred and are part of Oracle Cloud Infrastructure, which Oracle is responsible for patching on a quarterly basis 12/4/2025 – As of November 30th, 2025, BES had 11 critical findings in an open or in-progress state outside the 15-day remediation timeframe, and 1 critical finding was within the timeframe. BES had 27 high-rated findings in an open state outside the	9/12/2025 The number of critical/high issues being reported seem elevated compared to our numbers. It appears the numbers being reported include "deferred" along with "open". We distinguish between "open" and "deferred" because the "deferred" items are OCI vulnerabilities and thus not under our control to meet the target dates. This point is clarified at the end of the paragraph — however we have some concerns about reporting these items as "potentially impacting the project schedule and causing
94	The lack of an effective way to validate BES requirements could lead to project delays and unfulfilled user needs if DHS later identifies unmet contractual requirements.	Molina, Brad	Finding - Risk	4/25/2024	Requirements Analysis & Management	The Requirements Traceability Matrix (RTM) (BI-21) plays a vital role in ensuring the system's compliance with contractual commitments by associating each requirement with passed test case(s). However, the approved project schedule shows the RTM completed on 6/26/24, which falls after the Core ST exit decision on 5/10/24. The ASI provided the BI-22a System Integrity Review Tool (SIRT) to DHS on April 26, 2024, but withdrew the deliverable due to DHS concerns. This BI-22a deliverable may help DHS validate requirements.	It is unclear to DHS and IVV how the ASI will trace requirement coverage for SIT completion. DHS may be unable to make an informed decision on SIT exit criteria. This could lead to DHS starting Final Acceptance Testing (FAT) and then realizing that not all requirements have been fully met, resulting in delays.	IN PROGRESS • Develop a document that provides DHS with a feasible and effective way to map contract requirements to passed test cases, and, per the BI-19 (Complete and Final Test Plan),"Maps the implementation, functional and technical requirements to the test cases and test scripts". • Ensure test scripts thoroughly and comprehensively test the system to assure each requirement has been fully met. • Develop a deliverable that provides an audit trail for changes to the requirements from the contract such as obsoleted requirements, when that decision was made, and the change requests. • Provide weekly updates about the clean-up efforts in JIRA regarding incorrect statuses of epics, use case, and requirements. Completed • Create a detailed plan outlining the timeline for completing the clean-up efforts for the requirements and describe the metrics that will be used to evaluate the final outcome.	5/10/2024	3	3	Med	Open	2/28/2026 -In February, DHS reviewed the interim Requirements Traceability Matrix (delivered in January); however, the interim RTM remains incomplete and is not ready for DHS to use for validating requirements coverage. Several requirement mappings continue to require clarification or correction, and additional updates were requested. Non-functional requirement traceability also remains outstanding. Finalizing a fully updated RTM will be necessary for DHS to confirm that all contractual requirements are accurately represented before upcoming test activities, as any gaps may lead to rework or schedule impacts. 1/31/2026 - On January 8, 2026, the ASI delivered a revised, interim Requirements Traceability Matrix (RTM) to DHS for review and feedback (due on 1/23/2026). Work remains to complete requirement mapping and finalizing the RTM in alignment with DHS needs for validating all contractual requirements are included in the BES solution (excluding current CRs under development). Completing this effort is critical for DHS to ensure all BES functionality and components have been properly developed and validated across all testing phases. Any overlooked or misunderstood requirements may result in rework, new development, or schedule delays. 12-31-25 DHS and the ASI held an additional working session to continue reviewing contract requirements that remain untraced or unfulfilled. Since beginning this effort in June 2025, they have conducted twenty-two working sessions. As of July 17, 2025, 741 of the project's 2,971 requirements were identified as improperly mapped. An additional 69 untraced requirements were recently discovered and must also be addressed. At the end of December, 227 requirements remain unreconciled. On December 12, 2025, the ASI delivered an interim Requirements Traceability Matrix (RTM) to DHS covering general, technical, and operational requirements, allowing DHS	3/12/2026 Just a reminder that the actual start date for working on the RTM is 3/9/2026 and a submission to DHS on 4/1/2026. The interim work was to prepare us before the actual start date. Please consider a rewrite of this finding. 12/11/2025 Sorry. I don't have the recording or meeting notes but I thought I mentioned the interim RTM was an internal target date and not the date the deliverable was actually due and perhaps we should

ID	Title	Reporter	Finding Type	Identified Date	Category	Observation	Significance	Recommendation	Event Horizon	Impact	Probability	Analyst Priority	Finding Status	Status Update	Client Comments	Vendor Comments
93	Due to the lack of physical and technical testing of the interfaces and data transfer failure, conditions may exist with data format, boundaries, and dependencies. These failures may result in intermittent and hard-to-isolate problems or errors	Ho, Justin	Finding - Risk	4/29/2024	Integration and Interface Management	Aside from the functional testing accomplished during epic testing, specific data flow testing is usually part of an interface definition.	This testing is essential before initial deployment to prevent unexpected and difficult-to-resolve issues, such as scrambled or missing data – or the system may have a fault or exception. Since the Project has not established and tested the fault scenarios, we do not know how the system may react.	In Process * API interfaces should be tested for failure conditions during connection and transfer operations. * FTP and file interfaces should be tested for data and file integrity. * Test data fields for system impacts resulting from data that is poorly formatted, out of range, or other unexpected data transmission errors. Closed -Prioritization of remaining interface tests should continue, especially failure-condition scenarios to minimize potential impacts on schedule and system readiness. Removed * [Not applicable—No transactional interfaces, therefore no race conditions] API interfaces do not require race condition testing. * [Redundant with other recommendations] Testing for format, length, and other physical formatting errors in interface records and files is covered under existing test cases.	2024 2nd Qtr	3	1	Low	Open	2/27/26 – With 95% of technical interface testing completed (183 of 191), no additional tests were reported as Passed during the current reporting period. The ASI is addressing issues associated with failed tests and plans to rerun the affected tests once remediation is complete. The ASI has not indicated any concerns about completing the remaining tests by the System Integration Testing (SIT) cycle end date of April 3, 2026. IV&V will continue to monitor test execution through completion, including any retesting following defect remediation 1/31/26 – Technical interface testing is ongoing, with approximately 95% of planned tests completed (183 of 191) across 31 shared and BES interfaces. The ASI stated they are on track to complete the remaining tests ahead of the targeted System Integration Testing (SIT) cycle end date on April 3, 2026. IV&V will continue to monitor test execution through completion, including the need for any retesting resulting from defect resolution of test failures. 12/31/25 - Technical interface testing continues with approximately 65% of planned tests completed (134 of 204) across 31 shared and BES-specific interfaces. Due to ASI resource constraints, the revised ASI plan is to complete the remaining tests by the end of the next System Integration Testing (SIT) cycle on April 3, 2026. The ASI noted that the technical interface tests were not included in the SIT exit criteria. IV&V will request DHS to consider adding these tests in the full SIT testing process and calculations used to determine if the SIT exit criteria was met or not. IV&V notes that postponing the completion of these tests to the end of the next SIT phase could lead to late defect discovery, which reduces the time available for remediation and retesting before UAT, possibly impacting system quality and compliance readiness. 11/30/2025 - – Technical interface testing for file-based transfers continues, with approximately 52% of planned tests completed		06/14/2024 As mentioned at the May pre-meet, a technical Interface team plan does exist to address PCG's recommendations for this finding.5/11/2024 As mentioned at the pre-meet, a technical Interface team plan does exist to address PCG's recommendations for this finding.
83	Gaps in test coverage and slower-than-expected progress in testing may result in schedule delays if subsequent test phases uncover a higher volume of defects and user feedback than initially anticipated.	Ho, Justin	Finding - Issue	6/2/2023	Testing	After examining the Project's R11 QA Dashboards, R11 Traceability Dashboards, and Test Repository, gaps in testing coverage may exist and the progress of testing might be lagging. Concerning testing coverage, it appears that not all epics and use cases in R11 have associated test cases or are testing the correct use cases. In terms of progress, some test cases remain unexecuted, and not all defects have been resolved as the project commences System Integration Testing (SIT). The ASI has plans to complete the INT exit criteria by June 16, 2023, about 2 weeks after SIT begins.	Identifying defects early is vital for effective testing, as it is more efficient and cost-effective to address issues during the early testing stages. If there is slow progress or incomplete testing in the early stages, it can result in more defects leaking into subsequent testing phases, necessitating more extensive and rigorous testing efforts. Insufficient testing coverage or slower-than-anticipated progress throughout the project lifecycle increases the risk of encountering significant delays, extensions, or the introduction of defects into the production environment during the final testing stage, known as Final Acceptance Testing (FAT).	ONGOING -ASI to assess whether strengthened merge discipline and enhanced code reviews are associated with a measurable reduction in reintroduced defects over this SIT cycle. -ASI to continue to strengthen regression testing by retesting CR-impacted modules and previously resolved defects to reduce the risk of reintroduced issues. OPEN -DHS to review the subset of functional SIT test cases currently being executed to confirm that coverage is sufficient to mitigate the risk of defects escaping into UAT. CLOSED -ASI test team provide a visual of progress of test case execution compared to current testing schedule. -ASI assesses the potential impact of the large number of unresolved defects on future development efforts, ensuring a more robust and efficient development process - ASI develop and implement a revised testing approach to improve the completeness and thoroughness of future testing cycles. - The ASI should determine the root cause of the failure to identify simple defects in INT and SIT and implement effective improvement processes to confirm early testing is adequate before entering UAT/FAT (Closed 4/30/2024) - DHS and ASI monitor INT/SIT closely for both breadth and depth of testing to ensure the system is adequately tested (Closed 10/30/2024) - ASI utilize the two-week FAT testing pause to address and resolve outstanding SIT defects and apply the fixes in the FAT environment, ensuring that these defects do not recur when FAT resumes, optimizing testing efficiency and reducing potential defect rediscovery. (Closed 10/30/2024) NOT COMPLETED - The Project team reviews the SIT exit criteria and revises them as needed to ensure UAT/FAT begins with the best system possible. (3/31/2024) - DHS should request that the ASI develop a Corrective Action Plan to address the failure of prior test phases (Unit, INT) to capture defects that rolled into SIT (09/26/2024) - ASI test team provide a visual of progress of test case	UAT	2	2	Low	Open	2/27/26: With the SIT Go/No Go milestone for the five (5) Change Requests (CRs) approaching on 3/2/26, ongoing functional SIT testing continues to identify defects concentrated in the Eligibility area, along with reintroduced defects persisting in the Batch Framework and SSP areas. To mitigate recurrence, the ASI reports that it's continuing to improve code quality and testing controls through review checkpoints, daily build checks, and tighter merge validations. IV&V will continue to monitor these measures for evidence of their effectiveness as testing progresses. The ASI plans to expand the automated regression test suite next month by adding additional automated test cases. IV&V will continue to monitor coverage growth as gaps in automation coverage could limit functional validation and impact UAT readiness. 1/31/26: The test cases for the five (5) Change Requests (CRs) have not yet been approved by DHS. Once approved, execution results will be required to determine whether test cases provide adequate coverage and do not adversely impact existing system functionality. The ASI continues to rerun previous failed tests and remediate outstanding defects carried over from the prior SIT cycle, contributing to improved system stability ahead of upcoming CR testing. Reintroduced defects continue to be observed within the Batch Framework. To reduce defect recurrence, the ASI has implemented mitigation measures such as strengthened merge discipline and enhanced code review checkpoints. Based on observed progress to date, IV&V has lowered the severity of this finding from Medium to Low and will continue to monitor test execution results, defect trends, and the mitigation effectiveness through completion of the current SIT phase and assessment of UAT readiness. 12/31/25 - The SIT 0.13 phase met its exit criteria on December 12, 2025; however, DHS and IV&V continue to observe quality concerns. While planned scripted tests were		3/16/2026 (regarding status update) The automation process begins after DHS approves the SIT tests and SIT execution is underway. Although SIT has already started, we intentionally wait to automate until the manual tests have been executed at least once and confirmed to behave as expected. This prevents rework in both the manual and automated scripts if any test steps or expected results need adjustment. The review and case+selection process
80	Development delays have negatively impacted the project schedule and delayed go-live.	Frasca, Joe	Finding - Issue	6/30/2022	Configuration and Development	ASI had previously reported development activities have been slowed as they have been unable to achieve and/or maintain their expected development velocity. Previously, the development team was challenged with accurately estimating development task level of effort (i.e., story points) and the project has been challenged with producing a project schedule that accurately reflects realistic timelines (see Finding #74). The ASI continues to be challenged with finding qualified resources in a timely manner.	If the ASI is unable to achieve a velocity that enables them to meet planned milestones, schedule delays may lead to a delayed system go-live date. Failure to achieve a level of accuracy in estimating development tasks could lead to a project schedule that is flawed and unrealistic. Previously, DHS had indicated, and IVV agreed, that some of these delays were due to some ASI BAs lacking the expertise required to create optimal designs and system specifications that developers could consume without requiring extensive clarification from the ASI BA/SA team. DHS and IVV observed instances where ASI BAs/SAs have presented less than optimal designs and left it to DHS (who may lack software or UI design expertise) to improve, which has contributed to unproductive design sessions (see Finding #61). It remains unclear if scope creep has contributed to these delays.	ONGOING: - The ASI closely monitor progress on development efforts and create a mitigation strategy to avoid delays - ASI provides DHS software demonstrations (demos) of new BES functionality as part of the DDI process. COMPLETE CLOSED • ASI regularly report metrics that accurately track the total amount of remaining work to reach go-live and present a dynamic burndown chart to clearly display progress to stakeholders. (closed 3/31/2025) • ASI effectively track and regularly provide DHS (potentially via the weekly DDI status meeting) with an accurate velocity (e.g., story points per day/week/month) and assure that the current velocity is accurately and consistently reflected in the project schedule (closed 2/28/2025) • DHS request the ASI strategically add the right project team resources to effectively increase velocity. Note that adding additional junior resources may not be as effective as staffing additional expert-level development, analysis, and other resources that can lead and mentor junior resources. • ASI reviews the development process and identifies and mitigates the challenges preventing them from incorporating Epic demo activities into the project schedule. (9/29/23 - ASI will not be doing this, with DHS approval) • ASI consider taking steps to increase code quality, including enhancing the depth of developer unit testing, tracking and proactively preventing leakage, and enforcing effective coding standards and good governance. • The ASI should consider enhancing the depth of developer unit testing. - ASI provides DHS with the time needed to effectively evaluate the software demonstrations (demos) and elicit productive design discussions with DHS attendees during each demo.	Immediate	3	3	Med	Open	2/27/26: The ASI reported in February that development for CR2004-009 will not be completed by February 27, 2026, as planned, but will be extended to March 3, 2026. Since the SIT Go/No Go meeting is scheduled for March 2, 2026, the ASI will seek conditional approval from DIIS to proceed. The delay is minor and is attributed to the ASI not having access to a Virtual Server managed by DHS. 1/31/26: All five (5) change requests remain on track for completion prior to the start of the new SIT phase. Integration testing (INT) completion dates for several CRs were extended – one due to extended technical documentation review, one due to a design change, and one due to additional time requested for design review. Overall, these schedule adjustments do not impact the SIT milestone. IV&V will continue to monitor progress through completion of all change requests. 12/31/25 – A revised project schedule has been released to incorporate five new change requests. Development has begun on one CR, with the remaining four scheduled to start in January 2026. IV&V will continue to monitor progress against the updated schedule and evaluate whether emerging delays could impact overall project milestones. IVV will monitor data from the ASI that documents any impacts to functionality already developed and tested to understand regression testing activities. 11/30/2025 - The ASI has reported SIT defects, which include the areas of Batch processing, Reports, Correspondence, and Data Conversion. IV&V is analyzing these defects to understand any relationship to the development team's performance or if other factors are causing these issues. A root cause analysis of the defects by the ASI, which includes DHS and IV&V, would be useful. Additional change requests requiring development, primarily to meet federal mandates (HR1), are resulting in schedule adjustments. Once the new schedule is released, IVV will evaluate the ASI		3/12/2026 The specific delay was due to access to the new VM which is managed by DHS 10/11/2025 Please elaborate - what additional functionality during UAT is being referenced here? 7/15/2025 Per our Development Lead: "We had cleared the entire backlog before SIT. We had 50+ defects pending[med/lows] when we started SIT and all those defects were raised post 6/1/2025. everything
73	The planned BES infrastructure is complex which could be difficult to implement and lead to schedule/cost impacts.	Frasca, Joe	Finding - Risk	10/28/2021	System Design	Current ASI infrastructure plans include a significant number of sophisticated components that make up a complex cloud infrastructure. Further, the Project Team has yet to finalize components that will make up the BES infrastructure and the additional costs and time to configure, test, and implement the planned complex environment remain unclear.	If the level of effort to implement and manage the complexities of the BES infrastructure is not accurately accounted for and staffed by the ASI, the project could be met with unexpected costs and schedule delays. Delays in finalizing the components being implemented could exacerbate this risks and lead to further delays. Complex platforms often present system maintenance and operations challenges as system changes can hold the increased potential for system failure (i.e., due to the significant number of "moving parts") and increase the level of time and effort to resolve infrastructure and application-level bugs. Further, some components remain in an immature state compared to their legacy counterparts. For example, the project recently experienced a system failure because Google Cloud failed to clearly communicate a change that led to failure in another component (i.e., Nexus). Google Cloud is generally viewed as a less mature product offering, compared to their rivals (Amazon Web Services, Microsoft Azure). IV&V remains concerned that this could lead to failures at critical points in the project (including post-go live production failures) that could be difficult to resolve and lead to project disruption. If DHS intends to eventually reduce M&O outsourcing costs turning over M&O tasks to State employees, they could face challenges supporting tools they may not be familiar with in a complex infrastructure environment.	• ASI develop a process to closely monitor cloud and other product changes (software updates/new releases), manage changes, and regression test once changes/updates are applied. • The project team work to establish strong governance over the utilization and maintenance of the various system tools/components. • ASI allot time in the schedule to conduct proof of concepts to assure infrastructure components work as expected. • ASI maintain a detailed schedule for infrastructure tasks to avoid unexpected delays that could delay project milestones and the critical path.	Next several months	2	2	Low	Open	2/27/2026 - The Bindplane software rollout has been restarted, with the previously reported issues resolved. The ASI continues to make software updates to the BES infrastructure to simplify the overall solution and reduce costs. Demos are occurring for Wiz.io for possible use in the BES infrastructure. 1/31/2026 - No Material Update. 12/31/2025 - DHS and the ASI continue to assess new tools for use in the BES infrastructure. IV&V is seeking information as to whether the new tools will result in an overall environment that is easier to maintain and/or less costly. IVV is concerned that the Development progress on the Secure Enclave reported in the weekly infrastructure meeting has been unchanged at 97% since the end of September. Progress has been reported on the Secure Enclave infrastructure. This is out of sync with the updated project schedule that reports the Secure Enclave Epic 275 development at 100% complete. The ASI stated that the Secure Enclave is complete as reported on the project schedule, and the status progress reported in the infrastructure meeting relates to work needed to build out the production and disaster recovery environments. The ASI is updating the reporting to eliminate this confusion. 11/30/2025 - The ASI has rolled back the Bindplane software updates that created issues with the LINUX servers. With the former NXLog tool used to monitor the servers back in use, the ASI has time to work on a resolution. 10/31/2025 - Some defects reported during SIT have root causes in the stability of the BES infrastructure. The ASI states that the issues with shared resources and Bindplane software that occur in testing environments should not be present in production. However, IVV has not yet been provided with artifacts or project documentation to validate that these issues will not materialize in UAT or Production environments. 9/30/2025 - Work appears to be progressing on the full build out of the Secure Enclave. IV&V remains		2/13/2025 Perhaps for the next MSR we should review the outstanding recommendations to ensure progress status is reflected accurately. 11/17/2023 - Again, why is DR being referenced here? Per the current project schedule, the DR plan is scheduled to be submitted at the end of the year. Reminder: Pilot Go-Live is April 2024. 10/31/2023 - Vic - westill do notunderstand why this remains. 10/11/2023

ID	Title	Reporter	Finding Type	Identified Date	Category	Observation	Significance	Recommendation	Event Horizon	Impact	Probability	Analyst Priority	Finding Status	Status Update	Client Comments	Vendor Comments
70	Insufficient configuration management could lead to development confusion and reduce the effectiveness of defect resolution	Molina, Brad	Finding - Risk	8/23/2021	Configuration and Development	The BI-6 DDI Plan Deliverable, Section 5.2 establishes the framework for the Configuration Management Plan, however, it remains unclear if sufficient progress has been made toward establishing CM processes and governance, selecting CM tools (e.g., CMDB), and building out the CM infrastructure. The projects Security Plan has yet to be finalized which may include additional requirements or decisions that could impact CM. The project currently relies on Github for tracking of some configurations.	Configuration Management is a set of processes and procedures that ensures the BES is understood and works correctly. The BES solution includes tools that may provide a level of automation for Configuration Management that may reduce errors and should provide the project team with accurate, dynamic and timely information on some of the configuration items. However, it is critical that DHS/ASI agree to the full list of items that are included in the configuration plan along with the details regarding the management of the configuration items, reporting and audit features.	OPEN • ASI adhere to plans for configuration management as documented in BI-6 DDI Plan, Section 5.2 and clarify details and/or any changes with DHS. • ASI validate plans for configuration management with DHS and agree on a meaningful set of configuration items or settings they will track. COMPLETED • DHS and ASI work to clarify/solidify plans for the potential use of configuration management tools. • Identify the DHS POC for the Configuration Management Activities that would provide oversight of configuration management activities and assure defined CM steps and plans are being followed, are effective, and are achieving DHS objectives for CM. 7/31/2022	ASAP	2	2	Low	Open	2/28/2026 - The ASI confirmed that the configuration management plan will be included in the overall Infrastructure Management Plan, which is currently scheduled to be available for review on 4/13/2026. 1/31/2026 - IV&V continues to monitor the development and maintenance of the configuration management plan, validating that the ASI and DHS will have all required Configuration Items (CIs) in place for a successful Pilot and Statewide implementation. A missing CI when the BES solution goes live could result in outages, security exposure, data issues, or degraded user experience. 12/31/2025 - On December 19, 2025, DHS agreed to have the configuration management plan included in the overall M&O implementation plan. IVV is working with the ASI to clarify any updates to BI-6 System DDI Plan or related artifacts (such as decision log) that formally documents this approval. IVV will continue to monitor the development of the configuration management plan to confirm all required content will be defined and implemented prior to the Pilot implementation when BES M&O capability will go live. 11/30/2025 - The ASI has communicated: Progress is being made on completing a configuration management plan since February 2025. Configuration management was implemented in July 2025 However, a document that clearly states how configuration management has been implemented and how it will be managed has not been provided. DHS requires this plan to enable DHS and the ASI to agree on the full list of items that are included and their management, in preparation for the Pilot implementation, Statewide Rollout, and follow-on Production Support activities. 10/30/2025 Additional information was requested from the ASI regarding progress in defining and implementing configuration management for BES, but as of the end of the reporting period no additional status information was provided. 9/30/2025 - No material update.		7/10/2025 It does not appear our feedback was addressed. We mentioned at our last meeting that configuration management is in place, and we are currently working on leveraging ServiceNow to automate the related processes. So, the statement that configuration management is not in place prior to SIT is not accurate. 5/6/2025 Work hand in hand with M&O and CMDB